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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/672,543	09/26/2003	George J. Foos	427600900028	4633

7590 01/27/2005

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North Point
901 Lakeside Avenue
Cleveland, OH 44114-1190

EXAMINER

BOCHNA, DAVID

ART UNIT	PAPER NUMBER
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3679

DATE MAILED: 01/27/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/672,543

Applicant(s)

FOOS, GEORGE J.

Examiner

David E. Bochna

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 January 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) 23-25 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-22 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Claims 23-25 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected method, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on 1/3/05.

Information Disclosure Statement

2. The information disclosure statement filed 1/29/04 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each U.S. and foreign patent; each publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered.

Claim Objections

3. Claim 21 is objected to because of the following informalities:

line 2 – “warp” should be “wrap”.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1-5 are rejected under 35 U.S.C. 102(b) as being anticipated by Hyde.

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In regard to claim 1, Hyde discloses a pipe joint between a cylindrical male coupler received in a female coupler, said male and female couplers having terminal end portions with cooperating cam surfaces 20, 18 that facilitate insertion of said male coupler into said female coupler, said male and female couplers having cooperating projections R1, R1' that cam past one another when said male coupler is inserted into said female coupler and that engage one another to inhibit longitudinal separation of said male and female couplers.

In regard to claim 2, including a gasket 52 on said male coupler between said male coupling terminal end portion and said male coupler projection, and said female coupler having an inner surface sealingly engaged by said gasket.

In regard to claim 3, wherein said male and female couplers have longitudinal axes and said male and female couplers are articulable to skew said axes up to at least several degrees (grooves 58 and 54 all for articulation).

In regard to claim 4, wherein said male coupler has an abutment 48 engageable by said terminal end portion of said female coupler and said female coupler has an abutment 38 engageable by said terminal end portion of said male coupler.

In regard to claim 5, wherein said abutments are concavely curved.

In regard to claim 6, this a product by process claim and is given little patentable weight as long as the prior art discloses all of the structural limitations recited by the applicant. In this case Hyde discloses a pipe joint with all of the structural limitations recited in claim 1.

6. Claims 1, 7-10 and 11-12 are rejected under 35 U.S.C. 102(b) as being anticipated by Salter et al.

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In regard to claim 1, Salter et al. discloses a pipe joint between a cylindrical male coupler 702 received in a female coupler 750, said male and female couplers having terminal end portions with cooperating cam surfaces that facilitate insertion of said male coupler into said female coupler, said male and female couplers having cooperating projections 707, 755 that cam past one another when said male coupler is inserted into said female coupler and that engage one another to inhibit longitudinal separation of said male and female couplers.

In regard to claim 7, wherein said male coupler has a male spline 704 extending in an opposite direction from said male coupler, and said spline is displaced radially outward from said male coupler.

In regard to claim 8, wherein said female coupler has a female coupler spline 751 extending in an opposite direction from said female coupler, and said female coupler spline is displaced radially inward from said female coupler.

In regard to claim 9, wherein said female coupler has an outer surface with an outer surface diameter 710 that is not larger than the outer diameter of a pipe 516 that said female coupler is attached to.

In regard to claim 10, the inner surface diameter is not smaller than the inner diameter of a pipe that the male coupler is attached to (see fig. 12 where the inner diameter of the coupler 212 is the same size as the inner diameter of the pipe 14).

In regard to claim 11, Salter et al. discloses a cylindrical female pipe coupler 750 having a longitudinal axis, said coupler having a spline portion 751 and a female coupling portion 750 extending in opposite directions generally parallel to said axis, said spline portion being attachable to a pipe, said female coupling portion having inner and outer surfaces and a terminal

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end, a sloping cam surface 760 extending from said terminal end in a direction toward said longitudinal axis and back toward said spline portion, said cam surface terminating at an intersection with a shoulder 730 that extends from said inner surface of said female coupling portion toward said longitudinal axis so that said intersection is spaced toward said longitudinal axis from said inner surface and is spaced toward said spline from said terminal end of said female coupling portion.

In regard to claim 12, wherein said female coupling portion 750 is displaced radially outwardly of said longitudinal axis from said spline portion 751.

7. Claim 22 is rejected under 35 U.S.C. 102(b) as being anticipated by Jarvenkyla.

Jarvenkyla discloses an annular socket on at least one end thereof 2, a coupler having an annular spline 5 received in the socket, and adhesive bonding the spline 5 within the socket (via 7 and 8).

Claim Rejections - 35 USC § 103

8. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

9. Claim 13 is rejected under 35 U.S.C. 103(a) as being unpatentable over Salter et al.

Salter et al. discloses a transition portion 730 between the spline portion 751 and the female coupling portion 750, the transition portion extending toward the longitudinal axis from the female coupling portion. Salter et al. does not disclose that the inner surface facing in a direction toward the shoulder is a concaved, curved surface. However, it would have been obvious to a person having ordinary skill in the art to make the transition surface curved because

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a change in the shape of a prior art device is a design consideration within the skill of the art. In re Dailey, 357 F.2d 669, 149 USPQ 47 (CCPA 1966).

10. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Gowen.

Gowen discloses a female pipe coupler having an elastomeric gasket thereon, a lubricant on the gasket and a removable protective wrap covering the gasket and lubricant, but does not disclose that the gasket is an external gasket on the male coupler. However, it would have been obvious to a person to place the gasket and protective wrap on the male end of the pipe because the reversal of components in a prior art reference, where there is no disclosed significance to such reversal, is a design consideration within the skill of the art. In re Gazda, 219 F.2d 449, 104 USPQ 400 (CCPA 1955); In re Japikse, 181 F.2d 1019, 86 USPQ 70 (CCPA 1950).

Allowable Subject Matter

11. Claims 14-20 are allowed.

Conclusion

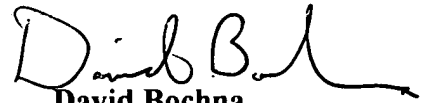
12. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Hoffmann et al., Scheyhing et al., Van Kooten, Meyer et al., Newell et al., Eagan and German Patent 4,305,609 all disclose similar couplings common in the art.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Bochna whose telephone number is (703) 306-9040. The examiner can normally be reached on 8-5:30 Monday-Thursday and every other Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (703) 308-2686. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-2168.

A handwritten signature in black ink, appearing to read "David Bochna", with a stylized flourish at the end.

David Bochna
Primary Examiner
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January 24, 2005